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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY-DOCKET NO.	CONFIRMATION NO.
09/991,036	11/20/2001	Richard Falk	EFIM0289	3634

31408 7590 01/23/2007  
LAW OFFICE OF JAMES TROSINO  
92 NATOMA STREET, SUITE 211  
SAN FRANCISCO, CA 94105

EXAMINER
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THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 09/991,036	Applicant(s) FALK, RICHARD	
	Examiner James A. Thompson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7, 17-19, 23-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 17-19, 23-26 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 2-4, filed 15 December 2006, with respect to the rejections under 35 USC §103 have been fully considered and are persuasive. The rejections under 35 USC §103 listed in items 3-6 of the previous office action, mailed 12 December 2006, have been withdrawn. However, upon further consideration, new grounds of rejection are set forth below.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 17-18 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloomquist (US Patent 6,295,133 B1) in view of Harrington (US Patent 6,179,485) and obvious engineering design choice.

Regarding claims 1, 17 and 24: Bloomquist discloses providing a database comprising a spot color layer associated with corresponding image data (figure 11(236) and column 13, lines 56-65 of Bloomquist); receiving a print job (column 14, lines 4-15 of Bloomquist) comprising page description language ("PDL") code (used in page composition software) (column 7, lines 51-61 of Bloomquist) that includes a reference to the spot color layer (column 13, lines 56-65 of Bloomquist); identifying the spot color layer in the PDL code (column 13, line 63 to column 14, line 3 of Bloomquist); retrieving from the database the corresponding image data associated with the identified spot color layer (column 13, lines 56-63 and column 14, lines 4-10 of Bloomquist); adding PDL code to the print job (column 14, lines 9-16 of Bloomquist) for painting the retrieved image data as a PDL layer in the print job (column 7, lines 51-59 and column 14, lines 16-29 of Bloomquist); executing the PDL code in the print job (column 14, lines 16-24 of Bloomquist); and painting the retrieved image data as a PDL layer in the print job (column 7, lines 51-59 and column 14, lines 23-29 of Bloomquist).

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Bloomquist does not disclose expressly that said spot color layer is references by a spot color name, and is thus a part of the PDL code; and painting the retrieved image data as a Postscript® pattern in the print job.

Harrington discloses painting retrieved image data as a Postscript® pattern in a print job (figure 3; column 3, lines 49-58; and column 4, lines 42-50 of Harrington) (also see first 22 lines of code comments in section containing code beginning on page containing columns 7 and 8 in Harrington).

Bloomquist and Harrington are combinable because they are from the same field of endeavor, namely digital document image processing and printing using page description languages. At the time of the invention, it would have been obvious to one of ordinary skill in the art to print specifically designed patterns by painting retrieved image data as Postscript® patterns, as taught by Harrington. The motivation for doing so would have been to preserve desired patterns whether the patterns are printed as color or as black-and-white (column 3, lines 49-58; and column 4, lines 42-50 of Harrington). Harrington clearly recognizes the benefit of using page description language code, such as Postscript®, to define and print a desired pattern. Therefore, it would have been obvious to combine Harrington with Bloomquist.

Bloomquist in view of Harrington does not disclose expressly that said spot color layer is references by a spot color name, and is thus a part of the PDL code. However, Bloomquist does teach that the spot color layer is referenced by a specific name ("mask"), but that other techniques of identification can be employed (column 13, line 63 to column 14, line 3 of Bloomquist). It would have been an obvious engineering design choice to simply use the name of the spot color to identify the spot color layer since, in a detailed image, several spot colors may be present. With several spot colors, a natural format for distinguishing between the various spot colors in the PDL code is to simply use the names of the spot colors themselves. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Bloomquist in view of Harrington in such an obvious way to obtain the invention as specified in claims 1, 17 and 24.

Further regarding claims 17 and 24: The process of claim 1 is performed using software (column 7, lines 40-51 of Bloomquist). Therefore, the physically embodied computer program of claim 24 is taught by Bloomquist. Further, the modules of the apparatus of claim 17 are each portions of the physically embodied software, along with the CPU and the appropriate portions of the computer memory, which perform the corresponding functions of each module.

**Regarding claims 2, 18 and 25:** Bloomquist discloses that the image data are definable by a user (figure 14D and column 15, lines 61-64 of Bloomquist).

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**5. Claims 3, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloomquist (US Patent 6,295,133 B1) in view of Harrington (US Patent 6,179,485), obvious engineering design choice, and Gass (US Patent 5,822,503).**

**Regarding claims 3, 19 and 26:** Bloomquist discloses providing a user interface on the RIP that allows a user to create, modify and/or delete the image data (figure 14D and column 15, lines 61-64 of Bloomquist).

Bloomquist in view of Harrington and obvious engineering design choice does not disclose expressly that said user interface allows a user to create, modify, and/or delete the spot color name in the database.

Gass discloses providing a user interface (figure 4 of Gass) that allows a user to create, modify, and/or delete the spot color pattern names in the database (column 6, lines 45-50 of Gass).

Bloomquist in view of Harrington and obvious engineering design choice is combinable with Gass because they are from the same field of endeavor, namely processing and manipulation of color in digital page description language files. At the time of the invention, it would have been obvious to a person of ordinary skill in the art provide in said user interface means by which a user may create, modify, and/or delete the spot color pattern names in the database, as taught by Gass. The motivation for doing so would have been to allow a user to be able to both define specific desired colors and patterns (column 6, lines 9-19 of Gass) and, with the knowledge of the minimum amount of separations required, print with as few separations as needed, thus reducing the overall printing cost (column 6, lines 25-31 of Gass). Therefore, it would have been obvious to combine Gass with Bloomquist in view of Harrington and obvious engineering design choice to obtain the invention as specified in claims 3, 19 and 26.

**6. Claims 7, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloomquist (US Patent 6,295,133 B1) in view of Harrington (US Patent 6,179,485), obvious engineering design choice, and Hains (US Patent 6,262,811 B1).**

**Regarding claims 7, 23 and 30:** Bloomquist discloses adding additional PDL code (column 13, lines 55-63 of Bloomquist) to the print job to perform other tasks (column 14, lines 4-10 of Bloomquist).

Bloomquist in view of Harrington and obvious engineering design choice does not disclose expressly that said other tasks include mirroring or four-way mirroring to prevent stitches from appearing in the printed output.

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Hains discloses mirroring (column 3, lines 35-39 of Hains or four-way mirror of halftone dot patterns (figure 8 and column 3, lines 39-46 of Hains). Using mirroring or four-way mirroring of halftone dot patterns naturally prevent printing artifacts such as stitching.

Bloomquist in view of Harrington and obvious engineering design choice is combinable with Hains because they are from similar problem solving areas, namely how to best represent halftone patterns in printing to achieve more pleasing and accurate image representations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use mirroring or four-way mirroring, as taught by Hains, for the image processing taught by Bloomquist. Since the digital image data processing taught by Bloomquist is performed by injecting page description language code, then the mirroring or four-way mirroring process performed by Hains would be performed by adding additional page description language code. Therefore, it would have been obvious to combine Hains with Bloomquist in view of Harrington and obvious engineering design choice to obtain the invention as specified in claims 7, 23 and 30.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James A. Thompson  
Examiner  
Technology Division 2625



03 January 2007



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